Contents of volume 34

No. 1 (pp 1–144) published 25 October 1990
No. 2 (pp 145–286) published 30 November 1990
No. 3 (pp 287–432) published 15 December 1990
No. 4 (pp 433–558) published 7 February 1991
No. 5 (pp 559–696) published 27 February 1991
No. 6 (pp 697–834) published 25 March 1991

Mini-review

Mishra P, Kaur S: Lipids as modulators of ethanol tolerance in yeast 697

Original Papers

Abbott TP, Nakamura LK, Nelsen TC, Gasdorf HJ, Bennett GA, Kleiman R: Microorganisms for degrading simmondsin and related cyanogenic toxins in jojoba 270

Afschar AS, Vaz Rossell CE, Schaller K: Bacterial conversion of molasses to acetone and butanol 168

Afschar AS, Bellgardt KH, Rossell CEV, Czok A, Schaller K: The production of 2,3-butanediol by fermentation of high test molasses 582

Al-Bashir B, Cseh T, Leduc R, Samson R: Effect of soil/contaminant interactions on the biodegradation of naphthalene in flooded soil under denitrifying conditions 414

Alijah R, Dorendorf J, Talay S, Pühler A, Wohlleben W: Genetic analysis of the phosphinothricin-tripeptide biosynthetic pathway of *Streptomyces viridochromogenes* Tü494 749

Aragozzini F, Maconi E, Scolastico S: Enantioselective hydrolysis of benzoyl 1,2-*O*-isopropylideneglycerol by *Bacillus coagulans* 433

Archer DB, Roberts IN, MacKenzie DA: Heterologous protein secretion from *Aspergillus niger* in phosphate-buffered batch culture 313

Arendt EK, Neve H, Hammes WP: Characterization of phage isolates from a phagecarrying culture of *Leuconostoc oenos* 58N 220

Barreto MTO, Melo EP, Almeida JS, Xavier AMRB, Carrondo MJT: A kinetic method for calculating the viability of lactic starter cultures 648

Bascarán V, Hardisson C, Braña AF: Regulation of extracellular protease production in *Streptomyces clavuligerus* 208

Beisswenger R, Kula M-R: Catalytic properties and substrate specificity of 3-hexulose phosphate synthase from *Methylomonas* M15 604

Bender E, Vogel R, Koller K-P, Engels J: Synthesis and secretion of hirudin by *Streptomyces lividans* 203

Bender H: Highly homologous cyclodextrin glycosyltransferases from *Bacillus circulans* strain 8 and a strain of *Bacillus licheniformis* (Short contribution) 229

Berovič M, Cimerman A, Steiner W, Koloini T: Submerged citric acid fermentation: rheological properties of *Aspergillus niger* broth in a stirred tank reactor 579

Beunink J, Rehm H-J: Coupled reductive and oxidative degradation of 4-chloro-2-nitrophenol by a co-immobilized mixed culture system 108

Bhalerao J, Patki AH, Bhave M, Khurana I, Deobagkar DN: Molecular cloning and expression of a xylanase gene from *Cellulomonas* sp. into *Escherichia coli* 71

Boer JP de, Teixeira de Mattos MJ, Neijssel OM: D(-)Lactic acid production by suspended and aggregated continous cultures of *Bacillus laevolacticus* 149

Boschloo JG, Paffen A, Koot T, Tweel WJJ van den, Gorcom RFM van, Cordewener JHG, Bos CJ: Genetic analysis of benzoate metabolism in *Aspergillus niger* 225

Bräu B, Hilgenfeld R, Schlingmann M, Marquardt R, Birr E, Wohlleben W, Aufderheide K, Pühler A: Increased yield of a lysozyme after self-cloning of the gene in *Streptomyces coelicolor* "Müller" 481

Breuil C, Chan M, Saddler JN: Comparison of the hydrolytic activity of commercial cellulase preparations 31

Brockamp HP, Kula MR: Purification and characterization of a class I fructose 1,6-bisphosphate aldolase from *Staphylococcus carnosus* 287

Bröker M, Bäuml O, Göttig A, Ochs J, Bodenbenner M, Amann E: Expression of the human blood coagulation protein Factor XIIIa in *Saccharomyces cerevisiae:* dependence of the expression levels from host-vector systems and medium conditions 756

Brown DE, Hasan M, Lepe-Casillas M, Thornton AJ: Effect of temperature and pH on lipid accumulation by *Trichoderma reesei* 335

Brunsbach FR, Reineke W: Production of 3,4-dihalogenated catechols from toluene and benzoate analogues by *Pseudomonas putida* strain PaW1 248

Bumbová-Linhartová R, Flieger M, Sedmera P, Zima J: New aspects of submerged fermentation of *Claviceps paspali* 703

Cansado J, Longo E, Calo P, Sieiro C, Velázquez JB, Villa TG: Role of killer character in spontaneous fermentations from NW Spain: ecology, distribution and significance 643

Caridis K-A, Christakopoulos P, Macris BJ: Simultaneous production of glucose oxidase and catalase by *Alternaria alternata* 794

Chan E-C, Kuo J, Lin H-P, Mou D-G: Stimulation of *n*-alkane conversion to dicarboxylic acid by organicsolvent- and detergent-treated microbes 772

Creuly C, Larroche C, Gros J-B: A fed-batch technique for 2-heptanone production by spores of *Penicillium roquefortii* 20

Cwalina B, Wilczok T, Weglarz L, Dzierżewicz Z: Activity of sulphite oxidase, thiosulphate oxidase and rhodanese in *Thiobacillus ferrooxidans* during covellite and chalcopyrite leaching 279

Denis S, Boyaval P: Microbial enzyme production in a membrane bioreactor 608

Dietrich G, Winter J: Anaerobic degradation of chlorophenol by an enrichment culture 253

Doelle MB, Greenfield PF, Doelle HW: The relationship between sucrose hydrolysis, sorbitol formation and mineral ion concentration during bioethanol formation using *Zymomonas mobilis* 2716 160

Dosoretz CG, Chen AH-C, Grethlein HE: Effect of oxygenation conditions on submerged cultures of *Phanerochaete chrysosporium* 131

Dykstra KH, Wang HY: Feedback regulation and the intracellular protein profile of *Streptomyces griseus* in a cycloheximide fermentation 191

Eikmanns BJ, Metzger M, Reinscheid D, Kircher M, Sahm H: Amplification of three threonine biosynthesis genes in *Corynebacterium glutamicum* and its influence on carbon flux in different strains 617

Eysmondt J von, Vasic-Racki Dj, Wandrey Ch: Acetic acid production by *Acetogenium kivui* in continuous culture – kinetic studies and computer simulations 344

Fukui T, Kawamoto T, Sonomoto K, Tanaka A: Long-term continuous production of optically active 2-(4-chlorophenoxy)propanoic acid by yeast lipase in an organic solvent system 330

Fukushima Y, Itoh H, Fukase T, Motai H: Stimulation of protease production by *Aspergillus oryzae* with oils in continuous culture 586

Fukuzaki S, Nishio N, Nagai S: The use of polyurethane foam for microbial retention in methanogenetic fermentation of propionate 408

Gaberc-Porekar V, Didek-Brumec M, Sočič H: Carbohydrate metabolism during submerged production of ergot alkaloids 83
Gadd GM, Gray DJ, Newby PJ: Role of melanin in fungal biosorption of tributyltin chloride 116
Gätje G, Gottschalk G: Limitation of growth and lactic acid production in batch and continuous cultures of *Lactobacillus helveticus* 446
Gätje G, Müller V, Gottschalk G: Lactic acid excretion via carrier-mediated facilitated diffusion in *Lactobacillus helveticus* 778
Goclik E, Müller-Hurtig R, Wagner F: Influence of the glycolipid-producing bacterium *Rhodococcus erythropolis* on the degradation of a hydrocarbon mixture by an original soil population 122
Goetghebeur S, Hu W-S: Cultivation of anchorage-dependent animal cells in microsphere-induced aggregate culture 735
Gourdon R, Rus E, Bhende S, Sofer SS: Mechanism of cadmium uptake by activated sludge 274
Greiner M, Winkelmann G: Fermentation and isolation of herbicolin A, a peptide antibiotic produced by *Erwinia herbicola* strain A 111 565
Gross B, Yonnet G, Picque D, Brunerie P, Corrieu G, Asther M: Production of methylanthranilate by the basidiomycete *Pycnoporus cinnabarinus* (Karst.) 387
Haasum I, Eriksen SH, Jensen B, Olsen J: Growth and glucoamylase production by the thermophilic fungus *Thermomyces lanuginosus* in a synthetic medium 656
Hamdi M, Khadir A, Garcia J-L: The use of *Aspergillus niger* for the bioconversion of olive mill wastewaters 828
Hanegraaf PPF, Punt PJ, Hondel CAMJJ vd, Decker J, Yap W, Verseveld HW v, Stouthamer AH: Construction and physiological characterization of glyceraldehyde-3-phosphate dehydrogenase overproducing transformants of *Aspergillus nidulans* 765
Hantula J, Kurki A, Vuoriranta P, Bamford DH: Rapid classification of bacterial strains by SDS-polyacrylamide gel electrophoresis: population dynamics of the dominant dispersed phase bacteria of activated sludge 551
Hayter PM, Curling EMA, Baines AJ, Jenkins N, Salmon I, Strange PG, Bull AT: Chinese hamster ovary cell growth and interferon production kinetics in stirred batch culture 559
Heyndrickx M, De Vos P, Vancanneyt M, De Ley J: The fermentation of glycerol by *Clostridium butyricum* LMG 1212t_2 and 1213t_1 and *C. pasteurianum* LMG 3285 637
Hilge-Rotmann B, Rehm H-J: Relationship between fermentation capability and fatty acid composition of free and immobilized *Saccharomyces cerevisiae* 502
Honorat-Pascal A, Monot F, Ballerini D: Comparative study of the enzymatic synthesis of L-valine by purified enzymes, crude extract, intact or permeabilized cells from *Bacillus megaterium* 236
Hopf NW, Yonsel S, Deckwer W-D: Ambruticin S production in air-lift and stirred-tank bioreactors 350
Hummel W: Reduction of acetophenone to *R*(+)-phenylethanol by a new alcohol dehydrogenase from *Lactobacillus kefir* 15
Inamori Y, Kuniyasu Y, Hayashi N, Ohtake H, Sudo R: Monoxenic and mixed cultures of the small metazoa *Philodina erythrophthalma* and *Aeolosoma hemprichi* isolated from a waste-water treatment process 404
Ishiyama J: Isolation of mutants with improved production of cAMP from *Microbacterium* sp. no. 205 (ATCC21376) 359
Jain S, Durand H, Tiraby G: Production of extracellular pectinase enzymes by a mutant (Pol6) of *Penicillium occitanis* 308
Janssen PH, Morgan HW, Daniel RM: Effects of medium composition on extracellular proteinase stability and yield in batch cultures of a *Thermus* sp. 789
Jong E de, Beuling EE, Zwan RP vd, Bont JAM d: Degradation of veratryl alcohol by *Penicillium simplicissimum* 420
Jonge RJ de, Breure AM, Andel JG van: Enhanced biodegradation of *o*-cresol by activated sludge in the presence of powdered activated carbon 683
Kaphammer B, Kulpa CF Jr: Identification of a sheath-associated protein involved in phosphate transport in *Sphaerotilus natans* 282
Kaska DD, Polne-Fuller M, Gibor A: Biotransformation of alkanes and haloalkanes by a marine amoeba 814
Kawahara Y, Yoshihara Y, Ikeda S, Yoshii H, Hirose Y: Stimulatory effect of glycine betaine on L-lysine fermentation 87
Kawahara Y, Nakamura T, Yoshihara Y, Ikeda S, Yoshii H: Effect of glycine betaine on the sucrose catabolism of an L-lysine producing mutant of *Brevibacterium lactofermentum* 340
Keay L, Walsh JM, Buchholz RM, Terando JM: Production of recombinant human erythropoietin in Bowes melanoma cells in suspension culture 198
Kemp GD, Dickinson FM, Ratledge C: Activity and substrate specificity of the fatty alcohol oxidase of *Candida tropicalis* in organic solvents 441
Keuth S, Rehm H-J: Biodegradation of phenanthrene by *Arthrobacter polychromogenes* isolated from a contaminated soil 804
Kilby NJ, Hunter CS: Towards optimisation of the use of 1.02-MHz ultrasound to harvest vacuole-located secondary product from in vitro grown plant cells (Short contribution) 478
Kim D-I, Cho GH, Pedersen H, Chin C-K: A hybrid bioreactor for high density cultivation of plant cell suspensions 726
Kimura T, Horikoshi K: Characterization of pullulan-hydrolysing enzyme from an alkalopsychrotrophic *Micrococcus* sp. 52
Kitaoka M, Taniguchi H, Sasaki T: Production of glucosyl-xylose using *Cellvibrio gilvus* cells and its properties 178
Klingeberg M, Hashwa F, Antranikian G: Properties of extremely thermostable proteases from anaerobic hyperthermophilic bacteria 715
Kolbe J, Kubicek CP: Quantification and identification of the main components of the *Trichoderma* cellulase complex with monoclonal antibodies using an enzyme-linked immunosorbent assay (ELISA) 26
Konishi H, Sato T, Yamagata H, Udaka S: Efficient production of human α-amylase by a *Bacillus brevis* mutant 297
Kotturi G, Robinson CW, Inniss WE: Phenol degradation by a psychrotrophic strain of *Pseudomonas putida* 539
Kourteva Y: Characterization of an extracellular glycoprotein inhibitor of tripsin (TI-23) produced by *Streptomyces* sp. 23 292
Kretzmer G, Schügerl K: Response of mammalian cells to shear stress 613
Krischke W, Schröder M, Trösch W: Continuous production of L-lactic acid from whey permeate by immobilized *Lactobacillus casei* subsp. *casei* 573
Kumar PKR, Lonsane BK: Solid state fermentation: physical and nutritional factors influencing gibberellic acid production 145
Kumar PKR, Singh A, Schügerl K: Formation of acetic acid from cellulosic substrates by *Fusarium oxysporum* 570
Kurek D, Odier E: Influence of lignin peroxidase concentration and localisation in lignin biodegradation by *Phanerochaete chrysosporium* 264
Kurzatkowski W, Kurzątkowski JD, Filipek J, Solecka J, Holska W, Kuryłowicz W: Assay of 6-oxopiperidine-2-carboxylic acid in fermentations of *Penicillium chrysogenum* PQ-96 (Short contribution) 354
Kurzątkowski W, Kurzątkowski JD, Filipek J, Solecka J, Kuryłowicz W: Reversion of L-lysine inhibition of penicillin G biosynthesis by 6-oxopiperidine-2-carboxylic acid in *Penicillium chrysogenum* PQ-96 (Short contribution) 397
Lee J, Agathos SN: Dynamics of L-valine in relation to the production of cyclosporin A by *Tolypocladium inflatum* 513
Leštan D, Štrancar A, Perdih A: Influence of some oils and surfactants on ligninolytic activity, growth and lipid fatty acids of *Phanerochaete chrysosporium* (Short contribution) 426

Lin J, Schmitt P, Diviés C: Characterization of a citrate-negative mutant of *Leuconostoc mesenteroides* subsp. *mesenteroides:* metabolic and plasmidic properties 628
Luef E, Prey T, Kubicek CP: Biosorption of zinc by fungal mycelial wastes 688
Lüthi E, Jasmat NB, Bergquist PL: Overproduction of an acetylxylan esterase from the extreme thermophile *"Caldocellum saccharolyticum"* in *Escherichia coli* 214
Marqués AM, Bonet R, Simon-Pujol MD, Fusté MC, Congregado F: Removal of uranium by an exopolysaccharide from *Pseudomonas* sp. (Short contribution) 429
Melzoch K, Rychtera M, Markvichov NS, Pospíchalová V, Basařová G, Manakov MN: Application of a membrane recycle bioreactor for continuous ethanol production 469
Michel-Savin D, Marchal R, Vandecasteele JP: Butyric fermentation: metabolic behaviour and production performance of *Clostridium tyrobutyricum* in a continuous culture with cell recycle 172
Mirhabibollahi B, Brooks JL, Kroll RG: A semi-homogeneous amperometric immunosensor for protein A-bearing *Staphylococcus aureus* in foods 242
Mohr G, Esser K: Improved transformation frequency and heterologous promoter recognition in *Aspergillus niger* 63
Molina E, Martinez E, Sánchez S, Garcia F, Contreras A: The influence of flow rate and the composition of supplied CO_2/air mixtures on discontinuous growth of *Tetraselmis* sp. (Short contribution) 103
Moresi M, Petruccioli M, Federici F: Modelling of cyclic fed-batch plus batch polygalacturonase production by *Aureobasidium pullulans* on raw orange peel 742
Morgan P, Lewis ST, Watkinson RJ: Comparison of abilities of white-rot fungi to mineralize selected xenobiotic compounds (Short contribution) 693
Nagasawa T, Nakamura T, Yamada H: Production of acrylic acid and methacrylic acid using *Rhodococcus rhodochrous* J1 nitrilase 322
Nagasawa T, Yoshioka H, Yamada H: Microbial conversion of *o*-acetyltoluidide into 4'-hydroxy-*o*-acetyltoluidide 325
Nagasawa T, Takeuchi K, Nardi-Dei V, Mihara Y, Yamada H: Optimum culture conditions for the production of cobalt-containing nitrile hydrates by *Rhodococcus rhodochrous* J1 783
Nair VC, Duvnjak Z: Reduction of phytic acid content in canola meal by *Aspergillus ficuum* in solid state fermentation process 183
Ney U, Schoberth SM, Sahm H: Anaerobic degradation of sulphite evaporator condensate in a fixedbed loop reactor by a defined bacterial consortium 818
Nicolas L, Hamon S, Frachon E, Sebald M, de Barjac H: Partial inactivation of the mosquitocidal activity of *Clostridium bifermentans* serovar *malaysia* by extracellular proteinases 36
Olama Z, El-Sayed M, Shaaban N, Temsah S: Biodegradation of solar by *Candida guilliermondii* strain 1 (Short contribution) 138
Omar SH, Büdecker U, Rehm H-J: Degradation of oily sludge from a flotation unit by free and immobilized microorganisms 259
Pampulha ME, Loureiro-Dias MC: Activity of glycolytic enzymes of *Saccharomyces cerevisiae* in the presence of acetic acid 375
Pan S-H, Kawamoto T, Fukui T, Sonomoto K, Tanaka A: Stereoselective esterification of halogen-containing carboxylic acids by lipase in organic solvent: effects of alcohol chain length 47
Pasti MB, Steven R, Hagen SR, Korus RA, Crawford DL: The effects of various nutrients on extracellular peroxidases and acid-precipitable polymeric lignin production by *Streptomyces chromofuscus* A2 and *S. viridosporus* T7A 661
Patel RN, Robinson RS, Szarka LJ: Stereoselective enzymatic hydrolysis of 2-cyclohexyl- and 2-phenyl-1,3-propanediol diacetate in biphasic systems 10
Porro D, Martegani E, Ranzi BM, Alberghina L: Heterologous gene expression in continuous cultures of budding yeast 632
Racek J: A yeast biosensor for glucose determination 473
Rajaram S, Varma A: Production and characterization of xylanase from *Bacillus thermoalkalophilus* grown on agricultural wastes (Short contribution) 141
Ramos MS, Harlander SK: DNA fingerprinting of lactococci and streptococci used in dairy fermentations 368
Raymond Y, Morin A, Champagne CP, Cormier F: Enhancement of fruity aroma production of *Pseudomonas fragi* grown on skim milk, whey and whey permeate supplemented with C_3–C_7 fatty acids 524
Renno DV, Saunders G, Bull AT, Holt G: The genetic stability of *Penicillium chrysogenum* transformants in a fermentor 364
Riesenberg D, Menzel K, Schulz V, Schumann K, Veith G, Zuber G, Knorre WA: High cell density fermentation of recombinant *Escherichia coli* expressing human interferon alpha 1 77
Roitman JN, Mahoney NE, Janisiewicz WJ: Production and composition of phenylpyrrole metabolites produced by *Pseudomonas cepacia* 381
Rolph CE, Moreton RS, Harwood JL: Control of acyl lipid desaturation in the yeast *Rhodotorula gracilis* via the use of the cyclopropenoid fatty acid, sterculate 91
Roy D, Chevalier P, Ward P, Savoie L: Sugars fermented by *Bifidobacterium infantis* ATCC 27920 in relation to growth and α-galactosidase activity 653
Sahasrabudhe AV, Modi VV: Degradation of isomeric monochlorobenzoates and 2,4-dichlorophenoxyacetic acid by a constructed *Pseudomonas* sp. (Short contribution) 556
Satsangee R, Ghosh P: Anaerobic degradation of phenol using an acclimated mixed culture 127
Saxena S, Bahadur J, Varma A: Production and localisation of carboxymethylcellulase, xylanase and β-glucosidase from *Cellulomonas* and *Micrococcus* spp. (Short contribution) 668
Schackmann A, Müller R: Reduction of nitroaromatic compounds by different *Pseudomonas* species under aerobic conditions 809
Seigle-Murandi F, Krivobok S, Steiman R, Thiault G-A, Benoit-Guyod J-L: Biotransformation of 2-acetylthiophene by micromycetes 436
Shiang M, Linden JC, Mohagheghi A, Grohmann K, Himmel M: Enhanced production of cellulase using *Acidothermus cellulolyticus* in fed-batch culture 591
Shlomai P, Ben-Amotz A, Margalith P: Production of carotene stereoisomers by *Phycomyces blakesleeanus* 458
Sierra-Alvarez R, Lettinga G: The effect of aromatic structure on the inhibition of acetoclastic methanogenesis in granular sludge 544
Singh A, Agrawal AK, Abidi AB, Darmwal NS: Properties of cellobiase from *Aspergillus niger* (Short contribution) 356
Smart JB: Transferase reactions of the β-galactosidase from *Streptococcus thermophilus* 495
Smith MR, Ewing M, Ratledge C: The interactions of various aromatic substrates degraded by *Pseudomonas* sp. NCIB 10643: synergistic inhibition of growth by two compounds that serve as growth substrates 536
Sørensen AH, Winther-Nielsen M, Ahring BK: Kinetics of lactate, acetate and propionate in unadapted and lactate-adapted thermophilic, anaerobic sewage sludge: the influence of sludge adaptation for start-up of thermophilic UASB-reactors 823
Sorkhoh NA, Ghannoum MA, Ibrahim AS, Stretton RJ, Radwan SS: Growth of *Candida albicans* in the presence of hydrocarbons: a correlation between sterol concentration and hydrocarbon uptake 509
Srivastava AK, Volesky B: On-line fluorescence measurements in assessing culture metabolic activities 450
Struch T, Neuss B, Bringer-Meyer S, Sahm H: Osmotic adjustment of *Zymomonas mobilis* to concentrated glucose solutions 518

Stumpf B, Kieslich K: Acyloin condensation of acyclic unsaturated aldehydes by *Mucor* species 598
Suárez M, Gibello A, Allende JL, Martín M, Ferrer E, Garrido-Pertierra A: Degradation of 3- and 4-hydroxybenzoate by *Klebsiella pneumoniae* 677
Surek B, Wilhelm M, Hillen W: Optimizing the promoter and ribosome binding sequence for expression of human single chain urokinase-like plasminogen activator in *Escherichia coli* and stabilization of the product by avoiding heat shock response 488
Suzuki Y, Hatagaki K, Oda H: A hyperthermostable pullulanase produced by an extreme thermophile, *Bacillus flavocaldarius* KP 1228, and evidence for the proline theory of increasing protein thermostability 707
Takii Y, Kuriyama N, Suzuki Y: Alkaline serine protease produced from citric acid by *Bacillus alcalophilus* subsp. *halodurans* KP 1239 57
Tani Y, Sakai Y, Chou S-G: Production of citric acid from methanol by a fluoroacetateresistant mutant of *Candida* sp. Y-1 5
Terasawa M, Inui M, Uchida Y, Kobayashi M, Kurusu Y, Yukawa H: Application of the tryptophanase promoter to high expression of the tryptophan synthase gene in *Escherichia coli* 623
Torrie JP, Senior DJ, Saddler JN: Production of β-mannanases by *Trichoderma harzianum* E58 303
Trück HU, Chmiel H, Hammes WP, Trösch W: Effects of oxygen supply on the production of nikkomycin with immobilized cells of *Streptomyces tendae* 1
Vaughan PA, Hall GF, Best DJ: Aryl acylamidase from *Rhodococcus erythropolis* NCIB 12273 42
Vincenzini M, De Philippis R, Sili C, Materassi R: Studies on exopolysaccharide release by diazotrophic batch cultures of *Cyanospira capsulata* 392
Walter U, Beyer M, Klein J, Rehm H-J: Degradation of pyrene by *Rhodococcus* sp. UW1 671
Watanabe M, Fukuda K, Asano K, Ohta S: Mutants of bakers' yeasts producing a large amount of isobutyl alcohol or isoamyl alcohol, flavour components of bread 154
Weissenfels WD, Beyer M, Klein J, Rehm H-J: Microbial metabolism of fluoranthene: isolation and identification of ring fission products 528
Westgate PJ, Emery AH, Hasegawa PM, Heinstein PF: Growth of *Cephalotaxus harringtonia* plant-cell cultures 798
Westlake K, Mackie RI: Peptide and amino acid transport in *Streptococcus bovis* 97
Westrin BA: Diffusion in immobilized-cell gels (Short contribution) 189
Wijffels RJ, Schukking GC, Tramper J: Characterization of a denitrifying bacterium immobilized in κ-carregeenan 399
Williams MG, Olson PE, Tautvydas KJ, Bitner RM, Mader RA, Wackett LP: The application of toluene dioxygenase in the synthesis of acetylene-terminated resins 316
Yamaguchi S, Mase T: Purification and characterization of mono- and diacylglycerol lipase isolated from *Penicillium camembertii* U-150 720
Yamaji H, Fukuda H: Long-term cultivation of anchorage-independent animal cells immobilized within reticulated biomass support particles in a circulating bed fermentor 730
Zeng A-P, Biebl H, Deckwer W-D: Production of 2,3-butanediol in a membrane bioreactor with cell recycle 463
Zyl PJ van, Kilian SG, Prior BA: The role of an active transport mechanism in glycerol accumulation during osmoregulation by *Zygosaccharomyces rouxii* 231

Erratum

Davies RJ, Holdsworth JE, Reader SL: The effect of low oxygen uptake rate on the fatty acid profile of the oleaginous yeast *Apiotrichum curvatum* (Appl Microbiol Biotechnol 33:569–573) Indexed in *Current Contents* 832